The Drought Impact Reporter

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Keystone, SD
Droughtreporter.unl.edu

- Launched in 2005 as nation’s on-line archive of drought impacts
- Reports from media, individual observers (“Users,” CoCoRaHS), agencies
- Searchable by time, place, scale, category, term
- Moderated @ NDMC

Impacts: Unpacking the definition

“An observable loss or change that occurred at a specific place and time due to drought.”

• “Loss or change” – implies an expectation of what should happen, based on past experience
• “Due to drought” – the attribution question – how do we know drought caused it?
Welcome to the Drought Impact Reporter!

Report Composition
45,400 reports

- 62.6% Media (28434)
- 2.7% User (1214)
- 2.5% Other Agency (1120)
- 0.0% Burn Ban (19)
- 0.1% Water Restriction (53)
- 4.6% NWS (2037)
- 27.5% CoCoRAHS (12487)
- 0.1% Hawaii (36)

Impact Composition
21,973 impacts

- 82.4% Media (18421)
- 3.4% User (750)
- 2.3% Other Agency (521)
- 0.1% Burn Ban (17)
- 0.1% Water Restriction (12)
- 0.4% NWS (9)
- 11.3% CoCoRAHS (2524)
- 0.1% Hawaii (30)

Impacts by month (start date):

<table>
<thead>
<tr>
<th>Month</th>
<th>2016</th>
<th>2017</th>
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</thead>
<tbody>
<tr>
<td>Jan</td>
<td>79</td>
<td>16</td>
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<tr>
<td>Feb</td>
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<td>Apr</td>
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<td>May</td>
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<td>Jun</td>
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<td>Jul</td>
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<tr>
<td>Dec</td>
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<td>0</td>
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</table>
Washington impacts, state, county & city, & USDM
Impacts in the Drought Impact Reporter

- Water Supply & Quality, 22.9%
- Agriculture, 19.4%
- Business & Industry, 1.7%
- Energy, 0.6%
- Tourism & Recreation, 2.4%
- Fire, 10.8%
- Society & Public Health, 8.6%
- Plants & Wildlife, 16.5%
- Relief, Response & Restrictions, 17.2%

Total impacts: 1,600
Impacts by state and category, 2016

- **Georgia**: 254
- **California**: 221
- **Alabama**: 117
- **North Carolina**: 116
- **Massachusetts**: 94
- **New Hampshire**: 82
- **Tennessee**: 80
- **New York**: 77

Bar chart showing impacts in the Drought Impact Reporter.
You can submit a report either by sending email to DIRinfo@unl.edu or by filling out the form below. To send an impact by email, please be sure to include:

--a description of the impact (how drought is affecting you, your livelihood, your activities, etc.)

--an approximate start date. When did you first notice this impact? If the impact is no longer affecting you, please estimate when it stopped.

--the location of the impact—what city/cities or county/counties are being affected? Don’t forget to include the name of the state!

We welcome photos as well; please note the conditions specified in the “Images” section below.
Description

A drought has occurred since 2010. 15 miles south of this site, rangeland is multi-year in several years. From Brian Gude, 28, 2015.

Source Federal

Pictures
Lack of rain causing problems for agriculture
Wilkes County, Georgia

Publication Date: 10-10-2016

Affected Areas: Wilkes County; Washington

Description: The reach of Hurricane Matthew is about 30 miles east of Wilkes County. The rains were not enough to settle the dust so another storm gone by without rain. The focus of many community ag-related meetings is centered on how to have alternative rations for cattle. The nights are chilly, so winter grazing could be planted without too much snow but it’s just too dry to plant and no forecast.

From an agricultural extension agent in Wilkes County, Georgia, on October 10, 2016

Source: Extension Agency

Pictures

Title: Picture shows nothing remaining in pasture. This is the most pastures in Wilkes County, the northern half.

Location: Northern Wilkes County
Photographer: photo by Frank Watson
Date: 10-10-2016
Via CoCoRaHS: Promoting drought impact reporting to volunteers...

* 19,000+ volunteers covering all 50 states!!

* CoCoRaHS “Message of the Day”

* Monthly e-mail reminders

* Guide to reporting drought impacts

* Banners on the Web

Courtesy: Henry Reges, Colorado State University
Public Policy Institute of California

PPIC WATER POLICY CENTER
What If California’s Drought Continues?

Ellen Hanak | Jeffrey Mount | Caitrin Chappelle | Jay Lund | Josué Medellín-Azuara | Peter Moyle | Nathaniel Seavy
Research support from Emma Freeman, Jelena Jedzimirovic, Henry McCann, and Adam Soliman
Supported with funding from the California Water Foundation, an initiative of the Resources Legacy Fund

- Urban areas
- Farmers, “growers”
- Low-income communities
- Habitat/biodiversity
Other recent efforts: Washington ag in 2015

- Washington State Department of Agriculture
- Grant from WA Dept. of Ecology
- Review by Washington Academy of Sciences

- Economic damage: $633 to $773 million, statewide (gross, not net)
- Limitations:
  - Drought vs. heat
  - Regional focus, self-reported data
  - NASS data doesn’t cover all crops, not available in a timely fashion
- Recommendation:
  - Ongoing data collection
Washington State Academy of Sciences recommendations

• Use net, not gross income. “… net farm income for Washington in 2015 was higher than in any of the previous four years by a significant amount.”

• Use a defined economic foundation, i.e.,
  • Economic Welfare
  • Input/Output
  • Computable General Equilibrium

• Be clear about whether the objective of the study is to calculate net impacts to agriculture or costs to farmers negatively impacted by the drought
“The report needs to be clear about whether the study’s objective was to quantify net effect of the drought at the state level or to quantify losses to negatively affected farms without including an offset for farms that may have increased their net returns compared to a year when there was no drought. It is a political question for WSDA, DOE, and the Legislature as to whether they are more interested in quantifying the harm to farmers that were negatively affected. Much of farm policy at the federal level is focused on creating stability in the farming sector by providing assistance through price supports or subsidized yield insurance. Another way to say this is that there is a distributional goal that is politically defined and which supersedes a goal based on economic efficiency.”

-- WSAS
WASHINGTON STATE SKI VISITS (SOURCE: NATIONAL SKI AREAS ASSOCIATION)

From them Washington State drought plan revision, vulnerability chapter

In the winter of 2004/2005, visitation to Washington State ski resorts dropped by 1.5 million visits from the prior year, a decrease of 77 percent. During the 2014/2015 winter, visitation numbers dropped by more than 900,000 visits from the previous year, a decrease of 59 percent.
Plan mapping ... next generation
States’ use of three types of planning to reduce drought vulnerability

<table>
<thead>
<tr>
<th>Drought Plan</th>
<th>HazMit/EM Plan</th>
<th>Water Policy/Plan</th>
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<td>Agency Connections</td>
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<tr>
<td>Local Connection</td>
<td>Local Connection</td>
<td>Local Connection</td>
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</tbody>
</table>
And at sub-state levels
Questions, comments?

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